## Is an Increase in the Real-Estate Tax Rate Affordable?

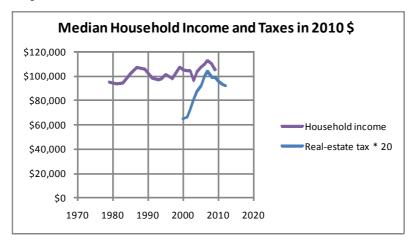
Report FAC/FCA-053 Revision A

Frederick A. Costello March 23, 2011

**Introduction**: At the March 17, 2011, meeting of the Board of Directors of the Federation of Citizens Associations, the Board voted to reduce the real-estate tax rate from the current \$1.09 to \$1.065 per hundred dollars of assessed value. The purpose of this report is to provide data by which the rate can justly be chosen.

By Revision A, we now use the mean price of homes from the budget documents, which differ from those in the County's demographics data. The budget documents also cover more years.

**Summary**: The real-estate tax rate should be set in part by the ability of the citizens to pay the tax. The ability can be estimated on the basis of the median household income. The following graph compares the median household income to the average real-estate tax for Fairfax County, both being adjusted by the CPI-U for inflation. We have assumed 1.5% inflation for 2011 and another 1.5% for 2012. We have not extrapolated the income data beyond 2009, the most recent data available at the demographics page. (We have multiplied the tax by 20 so the two curves could be more readily compared.)



Because the median income trend is downward, the ability to pay is decreasing; therefore, the real-estate tax rate should be chosen not to increase but possibly to decrease, despite the expected increase in the assessed value of the real estate. A tax rate of \$1.065, as shown in the graph, will keep the tax in FY2012 equal to that of FY2011, but, under our assumed 1.5% inflation rate, 1.5% lower in 2010 dollars. Income data for FY2010 is not available from government sources.

The large increase in the revenue was spent on the salaries and fringe benefits of County employees, including teachers and other instructional school personnel. Fringe benefits increased greatly, accounting for much of the increase in salary plus benefits. In addition to increases in remuneration, a 12% increase in instructional personnel added to the expenditures. This increase exceeded the 8% enrollment increase. Many assistants and specialists were added at all levels. Some of the increases might be attributed to the increase in the number of disadvantaged students.

### **Discussion**:

#### Analysis of the Revenues

The ability of people to pay taxes depends not so much on the value of the house in which they live as it does on their income; therefore, setting the real-estate tax rate should be based on the income. Data for the median income is available from 1979 to 2009, inclusive<sup>1</sup>. Data is readily available for the assessed value of real estate from FY2000 through FY2012<sup>2</sup>, based on an extrapolation for FY2012 made by the County in its budget documents. We have taken the data on assessed value and multiplied it by the tax rate. For FY2012, we have used a tax rate of \$1.065 per hundred dollars of assessed value. This rate may be compared to the \$1.09 for FY2011. These rates do not include the \$0.015 added for stormwater management.

The curve in the Summary shows a large increase in real-estate taxes from 2001 to 2008. The increase is due to the housing "bubble", along with a nearly constant tax rate (Exhibit 2). Instead of decreasing the tax <u>rate</u> to keep the tax relatively constant, the County chose to let the tax increase. Other sources of revenue remained relatively constant (as corrected for inflation), but revenue from real estate increased by approximately 50%.

The next question to answer is: What was done with the increased revenue? We look next at the expenditures.

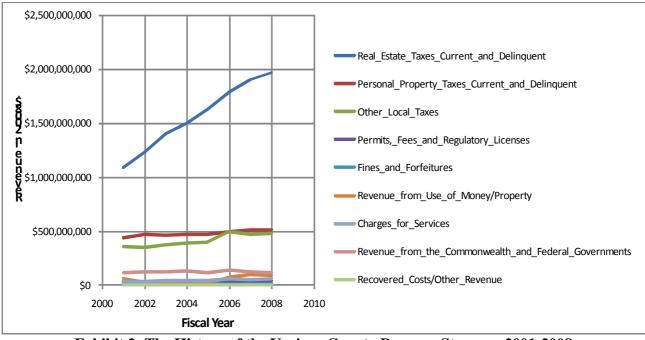


Exhibit 2: The History of the Various County Revenue Streams: 2001-2008

### Analysis of the County Expenditures

Of the approximately 40 expenditure streams, the school transfer fund increased the most (33%) from 2001 to 2008. It is also the largest single stream (Exhibit 3). Non-school fringe benefits increased 52%, although the magnitude is only 29% that of non-school personnel services. The next largest increase was

<sup>&</sup>lt;sup>1</sup> <u>http://www.fairfaxcounty.gov/demogrph/gendemo.htm#inc</u>

<sup>&</sup>lt;sup>2</sup> http://www.fairfaxcounty.gov/dmb/adopted/fy2010/overview/18 Trends Demographics.pdf and http://www.fairfaxcounty.gov/dmb/fy2012/advertised/overview.htm

in personnel services (labor costs), which increased by 27% from 2001 to 2008. We can see that the much of the increased revenue was used for County-worker remuneration.

We next ask: What was done with the increased public-school transfer funds? These funds flow from the County to the Fairfax County public schools, which is free to spend the funds as it wishes.

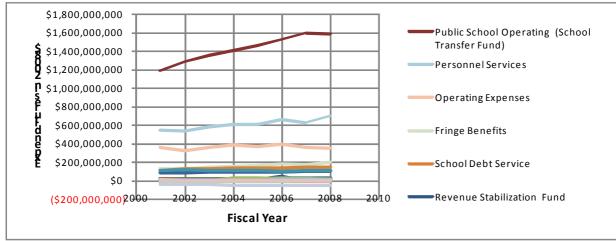


Exhibit 3: The History of the Various County Expenditure Streams: 2001-2008

# Analysis of Public School Expenditures

The increase in school budget was spent primarily on the instruction programs (Exhibit 4), which is dominated by labor costs. The increase from 2001 to 2008 is 30%. It occurs on the largest single school expenditure stream. This increase includes a 74% increase in fringe benefits and a 21% increase in salaries (Exhibit 5). Note that all of these expenditures are in 2008 dollars. They have been adjusted for inflation. Note also that we are not looking at the raises of an individual teacher. The curve is a composite for the entire teaching staff. With people retiring and younger people being hired to replace them as the other teachers age, we would expect the expenditures to be constant,

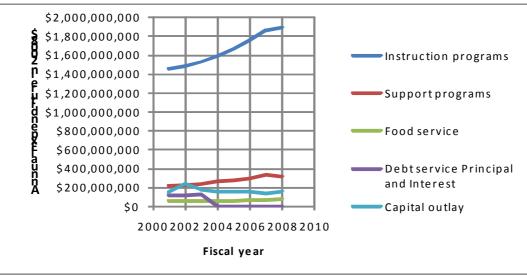
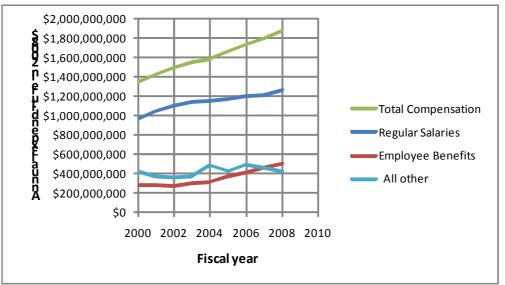


Exhibit 4: The History of the Public School Expenditures: 2001-2008

Looking again at the change from 2001 to 2008, the budget documents show that the actual number of teachers increased by 9%, although the total educational staff increased by 12%. Both of these exceed the 8% increase in the number of students. The increase in teacher salary scale was small (Exhibit 8); however, the increase in salary plus benefits<sup>3</sup> was 32%. If the newly hired teachers had been new graduates, the average salary would have decreased. It didn't. It increased 28%. In every category except transportation (Exhibit 6), the expenditure per employee, corrected for inflation, increased between 10% and 31%. Being corrected for inflation, these increases are over and above inflation. Not only did the teacher remuneration increase, but many more Assistant Principals, Supervisors, Specialists, Instructional Assistants, and Specialized Assistants were added.

The total expenditure increase in Exhibit 6 matches the increase shown in Exhibit 5; therefore, we have found where the increased revenue from 2001 to 2008 has been spent.



**Exhibit 5: The Components of the Instruction Program Expenditures** 

Some of the increase in number of teachers can be attributed to the increase in the number of disadvantaged students (Exhibit 7). The minority (Black, Asian/Pacific Islander, Native American/Alaskan, other race, and mixed race) percent of the general population in Fairfax County has risen from 30.3% in 2000 to 33.3% in 2009.

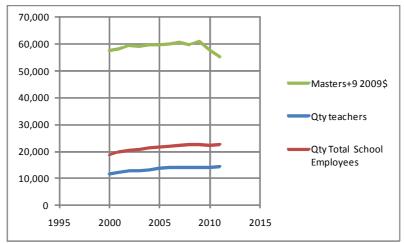
<sup>&</sup>lt;sup>3</sup> Benefits include the employer's part of social security and employer contributions to VRS, ERFC, retiree health benefits, life insurance, and health insurance.

	Pe	Personnel Count		Salary + benefits, in 2008\$		
	2001	2008	% increase	2001	2008	% increase
Leadership Team	19	20	5%	\$ 3,546,685	\$ 4,435,270	25%
Principals	201	195	-3%	\$ 28,053,184	\$ 33,110,574	18%
Assistant Principals	365	438	20%	\$ 41,866,506	\$ 60,055,285	43%
Supervisors	178	179	0%	\$ 23,358,592	\$ 26,515,577	14%
Specialists	820	1209	47%	\$ 73,623,553	\$ 139,233,967	89%
Technical Personnel	521	446	-14%	\$ 28,378,791	\$ 29,250,350	3%
Teachers	12597	13715	9%	\$ 947,954,962	\$1,215,036,736	28%
Instructional Assistants	1794	2177	21%	\$ 58,597,484	\$ 80,765,790	38%
Specialized Assistants	191	414	116%	\$-	\$ 12,115,424	
Office Assistant Personnel	1408	1440	2%	\$ 62,984,280	\$ 79,406,313	26%
Subtot	al 18094	20233	12%	\$1,268,364,035	\$1,679,925,286	32%
Trades Personnel	553	547	-1%	\$ 29,037,975	\$ 37,655,627	30%
Custodial Personnel	1292	1446	12%	\$ 54,168,502	\$ 66,989,909	24%
Transportation Personnel	32	35	9%	\$ 3,120,145	\$ 2,907,881	-7%
Tot	al 19970	22261	11%	\$1,354,690,657	\$1,787,478,703	32%
Benefit as % of salary				30.26%	43.62%	

Exhibit 6: Changes in Staff Count and Salary + Benefits from 2001 to 2008

		Self-		
		contained		Total
	Head	special		enroll-
	start	education	ESOL	ment
2008	1,132	11,455	21,751	166,307
2001	1,001	9,016	15,484	158,331
% increase	13%	27%	40%	5%

Exhibit 7: The Increase in the Number of Disadvantaged Students



**Exhibit 8: History of Teacher Salaries and Staff Count**